

## REMARKS

The rejections and comments of the Examiner set forth in the First Office Action dated May 8, 2003, have been carefully reviewed by the Applicants. In response, Applicants have amended the claims. Applicants respectfully request the Examiner to consider and allow the amended claims.

Claims 19, 12, 1, 2, 4, 14, 20, 9, 16, and 24 stand rejected under 35 U.S.C. §102(e) as being anticipated by Gilhousen et al. (U.S. Patent No. 6,185,246 B1). Gilhousen teaches two modulation steps. As aptly noted by the Examiner on page 3 of the present Office Action mailed May 8, 2003, Gilhousen teaches that the "output modulated signal of the exclusive-OR gate 252i (the data signal) is modulated at an Exclusive OR-gate 255i (modulator) by a Walsh sequence signal (an orthogonal code) provided from a Walsh generator 254i (modulating the data signal with an orthogonal code). See col. 15, lines 31-40." In contrast, the present invention only has a single modulation step. The present invention does not perform any separate exclusive-OR modulation step as taught by Gilhousen. Applicants have amended the independent claims to more particularly claim this aspect. For example, Claim 1 now includes the limitation wherein the data is modulated in a single step by a Hadamard function having pseudorandomly shuffled rows or columns. It is respectfully submitted that Gilhousen does not teach, disclose, suggest, or render obvious the present invention of a single step modulation system/method as presently claimed.

Claims 10 and 17 stand rejected under 35 U.S.C. §103 as being obvious over Gilhousen in view of Giallorenzi et al. (U.S. Pat. No. 6,091,760). Giallorenzi and

other prior art teaches the use of time division or frequency division. However, Claims 10 and 17 claim using code division to remove the transmit signal to distinguish the receive signal. It is respectfully submitted that neither Gilhousen, Giallorenzi, nor their combination disclose, teach, suggest, or render obvious a code division duplex as presently claimed by Claims 10 and 17.

Claim 8 stand rejected under 35 U.S.C. §103 as being obvious over Gilhousen in view of Chadwick et al. (U.S. Pat. No. 6,005,891). Chadwick teaches the measuring of the mismatch of an antenna. In contrast, the antenna of the present invention is intentionally driven mismatched. Therefore, Applicants respectfully submitted that Gilhousen, Chadwick, or their combination thereof, does not disclose, teach, suggest, or render obvious the subject matter of Claim 8.

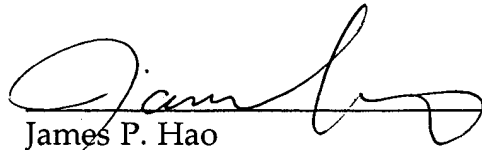
Claim 7 was objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants thank the Examiner for the allowability of this claim and have amended Claim 7 for allowance.

All claims are now in condition for allowance and such action is earnestly solicited by the Applicants. If there are any additional charges, please charge them to our Deposit Account Number 23-0085.

Respectfully submitted,

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